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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,556	11/28/2003	Tomoaki Abe	ST3001-0035	4976

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EXAMINER
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HU, SHOUXIANG

ART UNIT	PAPER NUMBER
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2811

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/722,556

Applicant(s)

ABE ET AL.

Examiner

Shouxiang Hu

Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,7-10,13-17 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,11,12,18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 4-5, 7-10, 13-17 and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on September 02, 2004.

Applicant's election with traverse of Group I and Species I in the above reply is acknowledged. The traversal is on the ground(s) that search and examination of all claims would place no undue burden on the examiner. This is not found persuasive.

The inventions of Group I and Group II are distinct; they have acquired a separate status in the art as shown by their different classification; and the search required for Group I is not required for Group II. Although only a few of classes and/or subclasses were given in the previous office action, they are only the exemplary ones. Along with required key word search, a thorough search is required in each of the classes/subclasses: 257/79-103, for Group-I invention; and 438/22, 25, 27-29, 34, 38, 94, 483, 758, 761, 767, and 936, for Group-II invention. Thus, search and examination of all of the claims in all of the species would impose a substantially undue burden upon the examiner. Furthermore, regarding the species election, it is further noted that, upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141.

Art Unit: 2811

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

2. Claims 1-3, 6, 11-12, 18 and 19 are objected to because of the following informalities and/or defects:

In claim 1, the term of "in a surface of said optically" should read as: --on a surface of said optically--.

Claims 11 and 12 each recite the subject matter that the LED has two upper electrodes and a lower electrode; but the disclosure fails to adequately describe what are the respective functions of the three electrodes therein, given that an LED is a diode that normally only has two electrodes therein.

Claim 19 recites the term of "one upper electrode"; but fails to clarify its relationship with the "one electrode" recited in claim 18.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2811

4. Claims 1-3, 6, 11-12, 18 and 19, as being best understood in view of the claim objections above, are rejected under 35 U.S.C. 102(e) as being anticipated by Fjelstad (US 6,583,444).

Fjelstad discloses a surface-mounted light-emitting diode (Figs. 7, 8 and 12), comprising: a light-emitting diode chip (332) sealed in an optically transmissive resin (348, 354 and/or 360); a plurality of metallic films (374, 328, and/or 326) formed on different locations in/or a surface of the optically transmissive resin; and a plurality of electrodes formed on or under the light-emitting diode chip and connected to respective ones of said metallic films, wherein the electrodes include the upper one and the lower one.

Regarding claim 3, the metallic film (374) under the lower electrode (378) in Fjelstad is conical shaped and has a reflective inner surface.

Regarding claim 11, the LED chip (332) in Fjelstad can naturally have more than one upper electrode connections as it can comprise more than one LEDs (see col. 10, lines 40-56).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References B-G are cited as being related to a resin package structure.

Art Unit: 2811

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shouxiang Hu whose telephone number is 571-272-1654. The examiner can normally be reached on Monday through Thursday, 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C. Lee can be reached on 571-272-1732. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH  
November 9, 2004



**SHOUXIANG HU**  
**PRIMARY EXAMINER**